

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

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Garage Door Opener - Lucerne

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

| Application | Specification | |
|------------------------------|---------------|----------|
| | Metric | English |
| Garage Door Opener Fasteners | 2 N.m | 18 lb in |

SCHEMATIC AND ROUTING DIAGRAMS

GARAGE DOOR OPENER SCHEMATICS

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

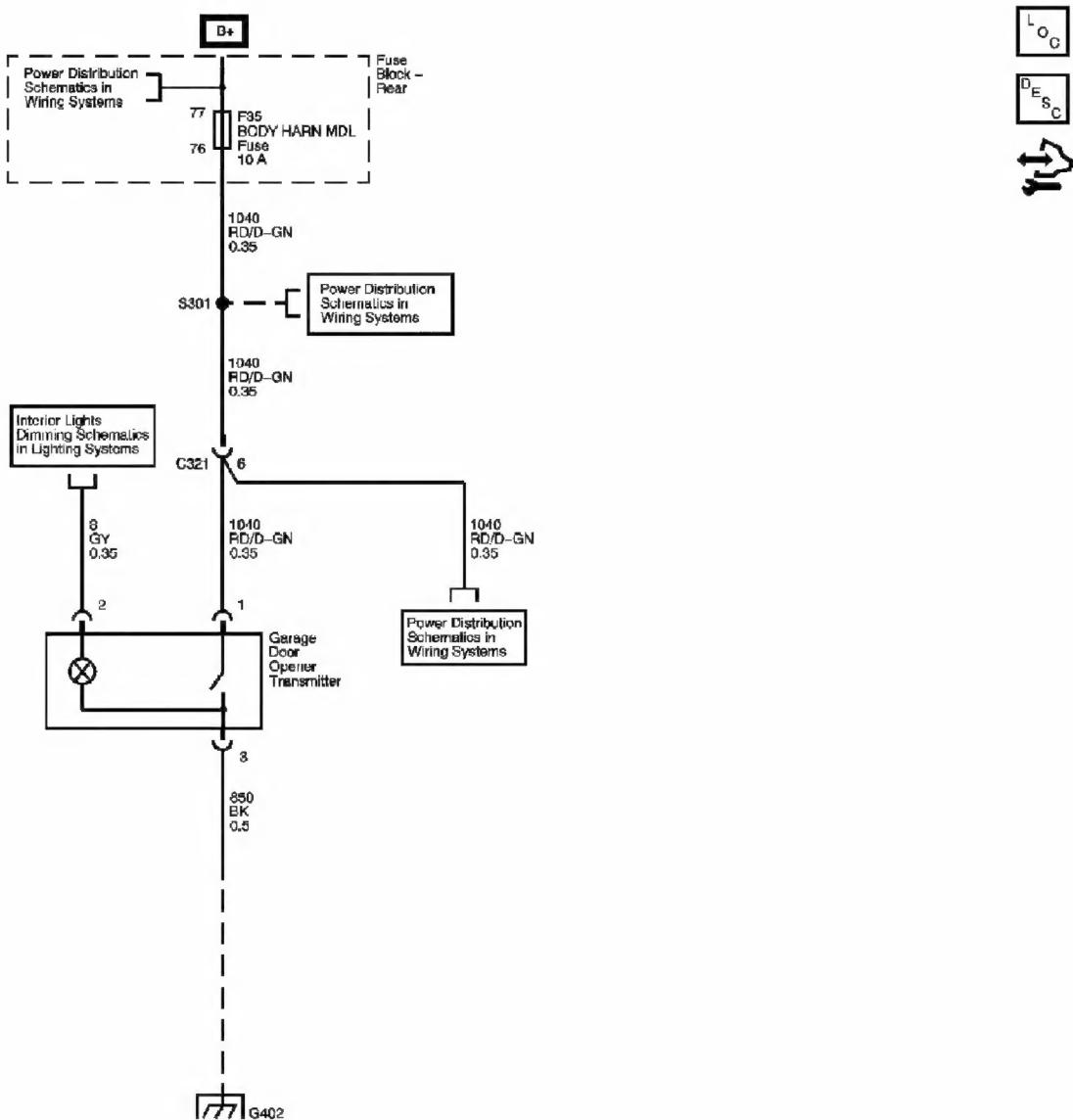


Fig. 1: Garage Door Opener Schematic
Courtesy of GENERAL MOTORS CORP.

COMPONENT LOCATOR

GARAGE DOOR OPENER COMPONENT VIEWS

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

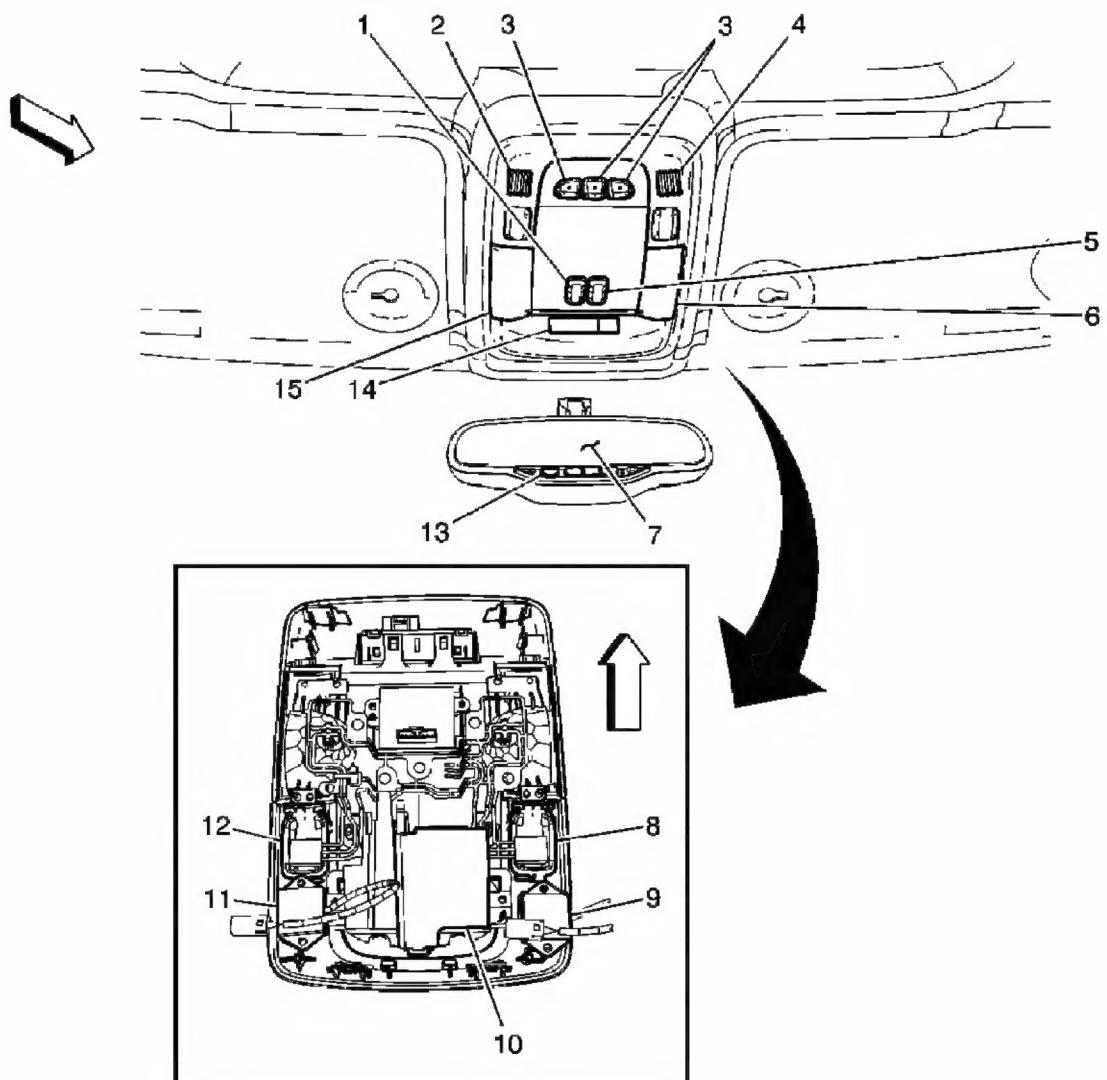


Fig. 2: Identifying Overhead Console & Inside Rearview Mirror Components
Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 2

| Callout | Component Name |
|---------|--|
| 1 | Sunroof Switch - Open/Close (CF5) |
| 2 | Cellular Microphone (UE1, U3U) |
| 3 | Garage Door Opener Buttons (UG1) |
| 4 | Cellular Microphone (UE1, U3U) |
| 5 | Sunroof Switch - Vent (CF5) |
| 6 | Courtesy Lamp - Overhead Console - Right |
| 7 | Inside Rearview Mirror |
| 8 | Courtesy Lamp Switch - Right |
| 9 | Cellular Microphone (UE1, U3U) |

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

| | |
|----|---|
| 17 | Garage Door Opener Transmitter (UG1) |
| 18 | Cellular/Memory Switch (UEF13U) |
| 19 | Cellular/Memory Switch (UEE13U) |
| 13 | Onstar Button Assembly |
| 14 | Inflatable Restraint I/P Module Indicator |
| 15 | Courtesy Lamp Overhead Console - Left |

GARAGE DOOR OPENER CONNECTOR END VIEWS

Garage Door Opener Transmitter (UG1)

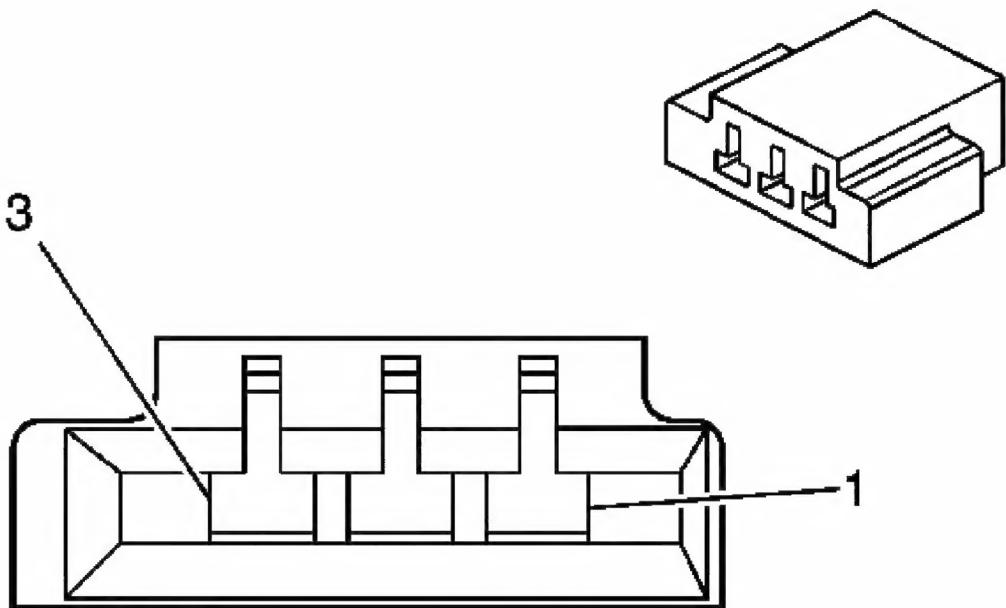


Fig. 3: Garage Door Opener Transmitter (UG1) Connector End View
Courtesy of GENERAL MOTORS CORP.

Garage Door Opener Connector End Views

Connector Part Information

- OEM: 12162335
- Service: 12162335
- Description: 3-Way F (BK)

Terminal Part Information

Connector Pin Information

Terminal Tray: 08-50-015/20

- Core/Insulation Crimp: E/C
- OEM: T2162335
- Release Tool/Test Probe: J-38125-213/J-35616-4A (PU)

Garage Door Opener Transmitter (UG1)

| Pin | Wire Color | Circuit No. | Function |
|-----|------------|-------------|--------------------------------------|
| 1 | RD/D-GN | 1040 | Battery Positive Voltage |
| 2 | GY | 8 | Instrument Panel Lamp Supply Voltage |
| 3 | BK | 850 | Ground |

DIAGNOSTIC INFORMATION AND PROCEDURES**DIAGNOSTIC STARTING POINT - GARAGE DOOR OPENER**

Begin the system diagnosis by reviewing the system Description and Operation. Reviewing the Description and Operation information will help you determine the correct symptom diagnostic procedure to use when a malfunction exists. Reviewing the Description and Operation information will also help you determine if the condition described by the customer is normal operation. Verify with the customer that they attempted programming with the key in the ON position or with the vehicle running (Buick LaCrosse/Allure). Verify with the customer that they have attempted to program for rolling code. Verify with the customer that they have referred to the owners manual and have contacted the HomeLink toll free assistance line. Refer to [**Symptoms - Garage Door Opener**](#) in order to identify the correct procedure for diagnosing the system and where the procedure is located.

SYMPTOMS - GARAGE DOOR OPENER

IMPORTANT: Review the system Description and Operation in order to familiarize yourself with the system functions. Refer to [Garage Door Opener Description and Operation](#).

Visual/Physical Inspection

- Turn the ignition key to the ON position and press any garage door opener (GDO) button. The LED should light when the unit has power and is functional.
- Inspect for aftermarket devices which could affect the operation of the GDO. Refer to [Checking Aftermarket Accessories](#) in Wiring Systems.
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to **Testing for Intermittent Conditions and Poor Connections** in Wiring Systems.

Symptom List

Refer to **Garage Door Opener Inoperative** in order to diagnose the symptom.

GARAGE DOOR OPENER INOPERATIVE

Garage Door Opener Inoperative

| Step | Action | Yes | No |
|--|--|---------------|--|
| This diagnostic assumes that the Home Link Tester is fully operational prior to use in the diagnostic routine. | | | |
| 1 | Did you review the Garage Door Opener Description and Operation and perform the necessary inspections? | Go to Step 2 | Go to <u>Garage Door Opener Description and Operation</u> |
| 2 | IMPORTANT: If the vehicle is equipped with a valet switch, verify that the switch is in the OFF position. If the vehicle is a Buick LaCrosse/Allure, verify that the ignition switch is in the ON position. Operate each button on the garage door opener (GDO) one at a time. Do all 3 buttons illuminate the LED? | Go to Step 4 | Go to Step 3 |
| 3 | Do any buttons illuminate the LED? | Go to Step 4 | Go to Step 5 |
| 4 | <ol style="list-style-type: none">Place the J 41540 HomeLink Tester adjacent to the GDO as indicated and follow the directions with the tool to clear the HomeLink of any codes and place it in default (test) mode. See <u>Special Tools</u>.Operate each button on the GDO. <p>Does the J 41540 verify each button when pressed? See <u>Special Tools</u>. Test the switched ignition voltage circuit for the following conditions:</p> <ul style="list-style-type: none">• An open | Go to Step 10 | Go to Step 9 |

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

| | | | |
|---|---|---------------|--------------|
| 4 | <ul style="list-style-type: none"> • Place the J41540 HomeLink Tester adjacent to the GDO as indicated • A short to ground and follow the directions with the tool to clear the HomeLink of any codes. Refer to Circuit Testing and Wiring Repairs. <p>(test) mode. See Special Tools.</p> <p>Did you find and correct the condition?</p> | Go to Step 10 | Go to Step 9 |
| 6 | <p>Test the inadvertent power supply circuit for the following conditions:</p> <ul style="list-style-type: none"> • An open • A high resistance • A short to ground <p>Refer to Circuit Testing and Wiring Repairs.</p> <p>Did you find and correct the condition?</p> | Go to Step 11 | Go to Step 7 |
| 7 | <p>Test the ground circuit for the following conditions:</p> <ul style="list-style-type: none"> • An open • A high resistance <p>Refer to Circuit Testing and Wiring Repairs.</p> <p>Did you find and correct the condition?</p> | Go to Step 11 | Go to Step 8 |
| 8 | <p>Inspect for poor connection at the harness connector. Refer to Testing for Intermittent Conditions and Poor Connections and Connector Repairs.</p> <p>Did you find and correct the condition?</p> | Go to Step 11 | Go to Step 9 |
| 9 | <p>Replace the GDO. Refer to Control Module References for replacement, setup and programming.</p> <p>Did you complete the replacement?</p> <p>Program the GDO with customers remote. Verify new battery for</p> | Go to Step 10 | - |

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

| | | | |
|----|--|---------------|--|
| 10 | successful programming of the Control Module References for replacement, setup and programming. Did you complete the procedure? | Go to Step 11 | Go to Step 8 |
| 8 | Open the system connection at the harness connector. Refer to Testing for Intermittent Conditions and Poor Connections and Connector Repairs . | | Possible Rolling Code or incompatibility with GDO |
| 11 | Did you find and correct the condition? | Go to Step 11 | Go to Step 9 |
| 9 | Replace the GDO. Refer to Control Module References for replacement, setup and programming. Did you complete the replacement? | System OK | Advise the customer to call HomeLink™ at 1-800-355-3515 |

REPAIR INSTRUCTIONS

GARAGE DOOR OPENER REPLACEMENT

Removal Procedure

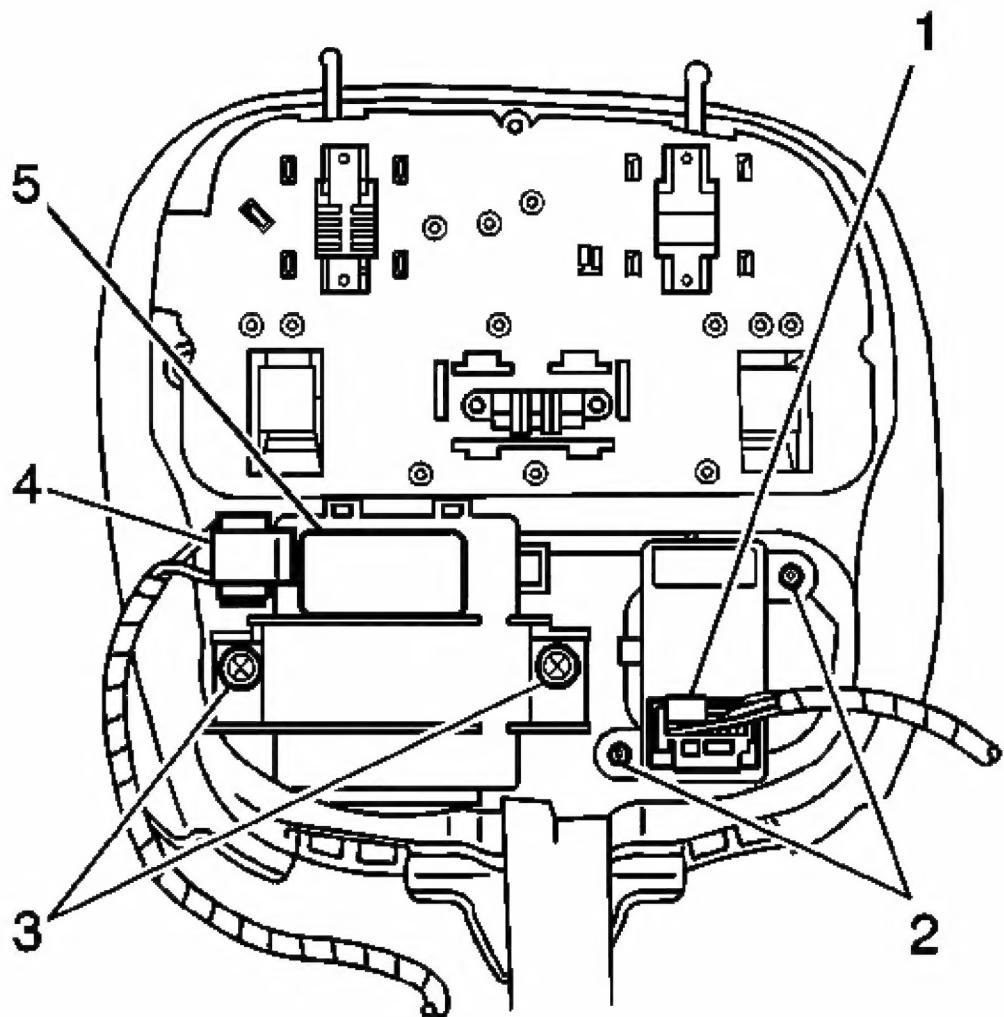


Fig. 4: View of Garage Door Opener, GDO Fasteners, Electrical Connector
Courtesy of GENERAL MOTORS CORP.

1. Remove the overhead console. Refer to [Roof Console Replacement](#) .
2. Remove the two garage door opener (GDO) fasteners (3).
3. Disconnect the electrical connector (4).
4. Remove the GDO (5).

Installation Procedure

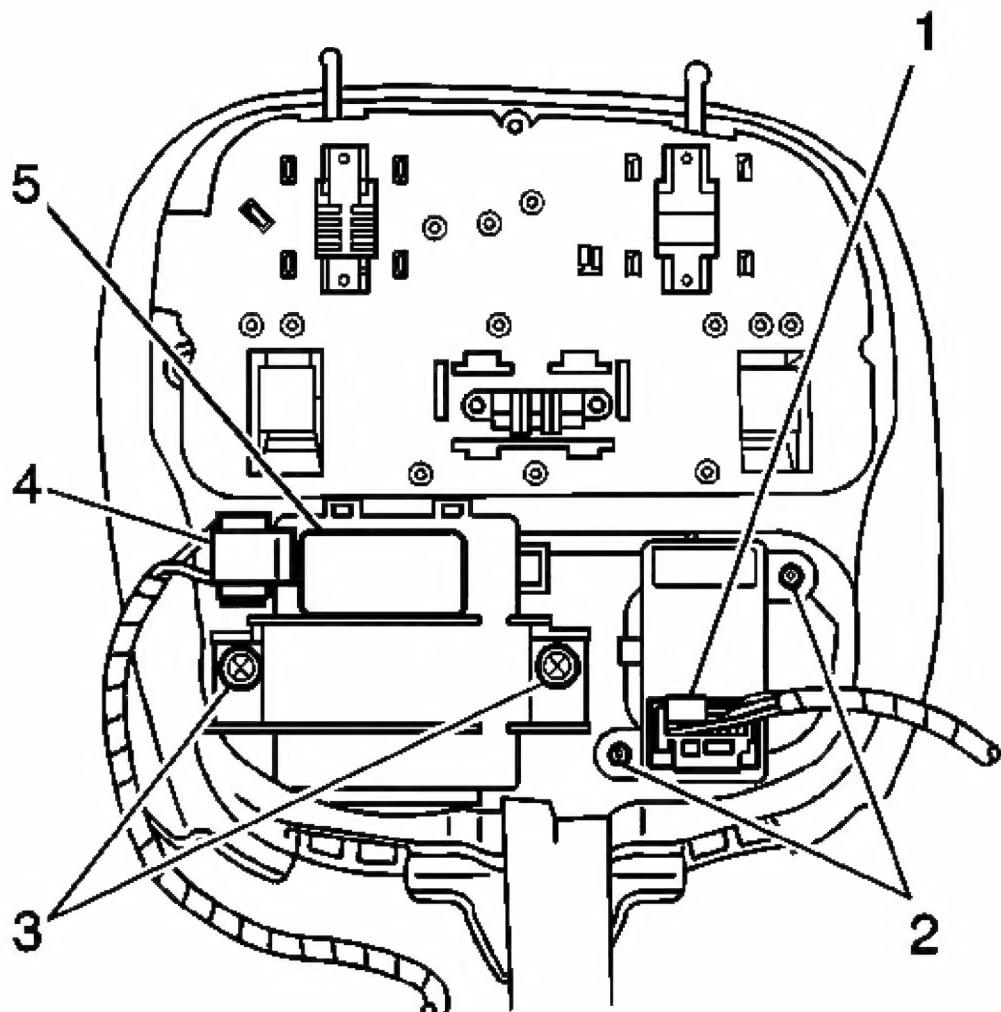


Fig. 5: View of Garage Door Opener, GDO Fasteners, Electrical Connector
Courtesy of GENERAL MOTORS CORP.

1. Connect the garage door opener (GDO) electrical connector (4).
2. Place the GDO (5) into the overhead console. Ensure the GDO buttons are placed correctly in their designated openings.

NOTE: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints,

lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

NOTE: Refer to FASTENER NOTICE .

3. Install the fasteners (3).

Tighten: Tighten the fasteners (3) to 2 N.m (18 lb in).

4. Install the overhead console. Refer to Roof Console Replacement .
5. Program the GDO. Refer to Control Module References for programming and setup information.

GARAGE DOOR OPENER PROGRAMMING - UNIVERSAL

Garage Door Opener Programming

IMPORTANT: DO NOT use the garage door opener (GDO) with any garage door opener that does not have the stop and reverse safety feature. This includes any garage door opener model manufactured before April 1, 1982. Be sure that people and objects are clear of the garage door you are programming.

The GDO is programmed by using the customer's hand-held transmitter(s).

Turn the ignition OFF while programming the GDO transmitter. Follow these steps to program up to 3 channels:

1. If you have previously programmed a transmitter, proceed to Step 2. Otherwise, hold down the 2 outside buttons on the GDO transmitter for approximately 20 seconds, until the light on the GDO transmitter begins to flash rapidly. Then release the buttons. This procedure erases any previous settings and initializes the memory for all 3 channels.
2. Decide which of the 3 channels you want to program to the transmitter you have.
3. Hold the end of the hand-held transmitter against the front surface of the GDO (less than 1 inch) so you can still see the light.
4. Using both hands, press the hand-held transmitter button and the desired button on the GDO transmitter. Continue to hold both buttons through Step 5.

IMPORTANT: The GDO is compatible with most, but not all, types and brands of transmitters. If the GDO light does not flash rapidly after 90 seconds, there may be a compatibility conflict with the transmitter used to program the GDO. Call HomeLink(tm) at 1-800-355-3515 in order to address this problem.

5. Hold down the buttons on both transmitters until you see the light on the GDO transmitter flash slowly and then rapidly. The rapid flashing, which could take up to 90 seconds, indicates that the GDO transmitter has been programmed. Release the buttons on both transmitters when the light starts to flash rapidly.

Training the GDO for Rolling Code Receivers

This procedure is for training the customer's rolling code garage door openers to their GDO transmitter. The GDO must already be programmed to its hand-held transmitter. The training process below must be completed within 30 seconds or it must be repeated.

1. Locate the train button on the garage door opener receiver. Refer to the operator's instructions for the garage door opener (or call HomeLink(tm) at 1-800-355-3515 for assistance). Follow instructions for the garage door opener in order to determine when the unit is in train mode.
2. Return to the GDO transmitter in the vehicle and press the button that you want trained for rolling codes 3 times, for 1 second each time. If not successfully programmed, try 2-5 seconds each time.
3. Press the button used again in order to verify that the GDO transmitter has been programmed.

You may use either the hand-held transmitter or the GDO to open the garage door.

The GDO is compatible with most, but not all, types and brands of transmitters. If the GDO light does not flash rapidly after 90 seconds, there may be a compatibility conflict with the transmitter used to program the GDO. Call HomeLink(tm) at 1-800-355-3515 in order to address compatibility concerns.

Erasing Channels

To erase programmed channels, hold down the 2 outside buttons until the light on the GDO transmitter begins to flash. Individual channels cannot be erased, but can be reprogrammed using the Garage Door Opener Programming and the Training GDO for Rolling Code Receivers procedures.

Non-Compatible Garage Door Openers

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

| Manufacturer | Model Number |
|-----------------|---------------|
| Chamberlain | G-3467 |
| Click Card | ATDG-90 |
| Genie | AR-55 |
| Genie | AR-30 |
| Linear | Code Red |
| Linear | Moore-o-matic |
| Linear | DX Format |
| Micom | Safeway |
| Pulsar/Allister | 20 |
| Skylink | Skylink |
| Stanley | 1048 |
| Stanley | 1054 |
| Stanley | 1064 |
| Teletron | T-22A |
| Teletron | T-80 |
| Teletron | T-80G |
| Teletron | TP-21 |

DESCRIPTION AND OPERATION

GARAGE DOOR OPENER DESCRIPTION AND OPERATION

The garage door opener (GDO) is located in the overhead console or drivers side sunshade. If battery voltage is lost due to a condition such as a dead battery, the GDO unit relies on the non-serviceable internal power backup supply. The unit is programmed using the customer's hand-held transmitters for the garage doors, electric entrance gates or lighting and security systems.

The GDO is rolling code capable. Rolling code is a system that allows the code that the customers receiver receives from the GDO to change every time the GDO is used within operating range of the receiver. Rolling code programming requires the customer to push a learn/program button on the GDO receiver at their home. This button is usually located on the receiver unit under a cover (light cover) on one end of the unit. The customer must follow the GDO manufacturers instructions to program/learn the receiver to accept the HomeLink as an authorized opener for their unit. When the receiver and the GDO are initially programmed together, a code is established and a new code is created for every new transmission. The software in the receiver recognizes the GDO and accepts the new code.

The GDO is compatible with most, but not all types and brands of transmitters. If a problem should occur with a compatibility conflict with a transmitter, call HomeLink(tm) at 1-800-

355-3515.

The GDO is a transmitter operating between 288-399 MHz. The power and range of the transmitter is limited to comply with laws governing the generation of radio frequency interference (RFI). The transmitter is programmed by the user to accept the signal generated by the user's transmitters. Refer to **Control Module References** for replacement, setup and programming.

The GDO has 3 buttons that may be programmed for individual transmitter/receiver combinations to control up to 3 GDOs, security gates and lighting systems. Each button represents a transmitter code section of the transmitter, which operates separately from any other button and may be considered a separate transmitter. Operation consists of simply pressing a button to activate the corresponding transmitter.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Special Tools

| Illustration | Tool Number/Description |
|---------------------|------------------------------------|
| | <p>J 41540 HomeLink Tester</p> |

2006 Buick Lucerne CXS

2006 ACCESSORIES & EQUIPMENT Garage Door Opener - Lucerne

